

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP2004/053264

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 C21B7/10

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 C21B F28D F28F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, COMPENDEX, PAJ

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DATABASE WPI Section Ch, Week 197619 Derwent Publications Ltd., London, GB; Class J08, AN 1976-35010X XP002282752 -& JP 51 035661 A (NIPPON ALUMIN MFG) 26 March 1976 (1976-03-26)	1,2,6, 13-19, 21,24, 28-30,32
A	abstract  figures	8-12, 25-27

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

\* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
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- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
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Date of the actual completion of the international search

9 May 2005

Date of mailing of the international search report

18/05/2005

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	GB 2 079 655 A (CONNELL JOHN O; REDPATH ENGINEERING LTD) 27 January 1982 (1982-01-27)	1,2,6, 13-19, 21,24, 28-30,32
A	abstract; figures 1,2  page 1, right-hand column, line 73 - line 103	8-12, 25-27
A	----- DE 33 13 998 A (VOEST ALPINE AG) 8 December 1983 (1983-12-08) the whole document	1-34
A	----- EP 1 156 124 A (KM EUROPA METAL AKTIENGESELLSCHAFT) 21 November 2001 (2001-11-21) claims; figures	1-34
A	----- DATABASE COMPENDEX 'Online! ENGINEERING INFORMATION, INC., NEW YORK, NY, US; ABDULALIYEV Z E ET AL: "Analysis of stresses in tube sheet of heat exchanger by three dimensional models" XP002282751 Database accession no. EIX99254647555 abstract & ASME PET DIV PUBL PD; AMERICAN SOCIETY OF MECHANICAL ENGINEERS, PETROLEUM DIVISION (PUBLICATION) PD; STRUCTURAL DYNAMICS AND VIBRATION 1999 ASME, FAIRFIELD, NJ, USA, 1999, -----	16

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# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
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